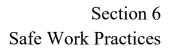


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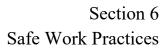
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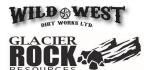






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## 6.0 Safe Work Practice Policy

The safe work practice policy of Wild West Dirt Works Ltd. and Glacier Rock Resources Inc. is to ensure that a detailed summary of the proper practices for job site tasks are carried out in the safest manner at all times. A summary of practices have been implemented to reduce the risk of injury or hazards on any of our job sites. These have been put into place to ensure that all jobs are carried out in the safest manner possible at all times, and are readily available for reference to all.

Safe Work Practices should identify:

- Motivation for the employee to use the practice, including specific points and benefits.
- Specific sources or problems.
- Protective devices or materials used.
- Applicable rules and regulations.
- The practice guidelines should describe the correct way to perform the task and refers the reader to the applicable rules or regulations.

Prior to starting any job, it is the responsibility of all employees to make sure all applicable safe work practices for the tasks and challenges present are available on the work-site and accessible to all employees. Safe work practices are to be reviewed annually by management to be kept current and reflective of the growth of the company and scope of work.

With each new task assigned to a worker, a reference shall be made to the Safe Work Practices and any absent SWP's will be added immediately and reviewed prior to starting the task.

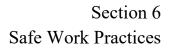
Monty Cissell, President

July 5, 2023



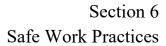
## 6.1 Safe Work Practice Annual Review

	De	evelo	ped/A	dded	Review					Re	view		Review	Review
Job Practice	Da	ate M/	D/Y	By Who m	D	ate M/	D/Y	By Wh om	Date M/D/Y			By Wh om		
Bear Awareness	09	15	17	MKC	09	01	18	MC	04	01	20	MC	MAR 21 2022; ALL	JULY 8 2023; KC
Cell Phone Use while on the job	09	15	17	MKC	09	01	18	KC	04	01	20	MC	FEB 7 2022; ALL	DEC 19 2022; ALL
Cleaning Solvents & Flammables	09	15	17	MKC	09	01	18	MC	04	01	20	MC	FEB 7 2022; ALL	JULY 8 2023; KC
Compressed Air	09	15	17	MKC	09	01	18	MC	04	01	20	MC	FEB 28 2022; ALL	JULY 8 2023; KC
Compressed Gas Cylinders	09	15	17	MKC	09	01	18	MC	04	01	20	MC	FEB 28 2022; ALL	JULY 8 2023; KC
COVID in the Workplace	02	01	21	КС							<u> </u>		SEPT 6 2022; ALL	JULY 8 2023; KC
Cranes, Hoists & Lifting Devices	09	15	17	MKC	09	01	18	MC	04	01	20	MC	NOV 29 2021; ALL	JULY 8 2023; KC
Defective Tools	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Driving Safety	09	15	17	MKC	09	01	18	MC	04	01	20	MC	NOV 2 2021; ALL	JULY 19 2023; ALL
Fatigue Management Practice	09	15	17	MKC	09	01	18	KC	04	01	20	MC	SEPT 13 2021; ALL	MAR 20 2023; ALL
Frostbite & Freezing	09	15	17	MKC	09	01	18	MC	04	01	20	MC	DEC 6 2021; ALL	JULY 8 2023; KC
WHMIS2015	07	05	21	ALL				1					JULY 19 2022; KC	JUNE 14 2023;ALL
Grinding	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JAN 3 2022; ALL	JULY 8 2023; KC
Hand Power Tools	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JAN 3 2022; ALL	OCT 17 2022; ALL
Hand Signals	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Heat Stress	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC





Heavy	09	15	17	MKC	09	01	18	MC	04	01	20	MC	July 19 2022;	JULY 8
Equipment Operation													KC	2023; KC
Heavy Equipment Operation –	10	20	22	MKC										JULY 8 2023; KC
Mulcher														
Housekeeping	09	15	17	MKC	09	01	18	MC	10	30	20	MC	SEPT 20 2021; ALL	JULY 8 2023; KC
House Keeping- Living Quarters	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Journey Management	09	15	17	MKC	09	01	18	KC	04	01	20	МС	JULY 19 2022; KC	JULY 8 2023; KC
Lifting Manually	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JAN 23 2023; ALL
Lifting/Hoisting	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	OCT 3 2022; ALL
Load Securement	09	15	17	MKC	09	01	18	MC	04	01	20	MC	NOV 5 2021;ALL	MAY 1 2023; ALL
				1000				1						
Maintenance & Repair of Equip	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	APRIL 24 2023; ALL
Noise Exposure	09	15	17	MKC	09	01	18	MC	04	01	20	MC	OCT 25 2021; ALL	JULY 8 2023; KC
Office Safety	09	15	17	MKC	09	01	18	KC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Portable Heaters	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Portable Ladders	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Power Sources & Power Lines	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Pressure Washer Safety	09	15	17	MKC	09	01	18	MC	04	01	20	MC	APRIL 11 2022; ALL	JULY 8 2023; KC
Practices for Vehicle	09	15	17	MKC	09	01	18	MC	04	01	20	МС	FEB 22 2022; ALL	JULY 8 2023; KC
Breakdowns Propane Cylinders	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	MAR 6 2023; ALL
Response Strategy	09	15	17	MKC	09	01	18	MC	04	01	20	MC	OCT 13 2021; ALL	JULY 4 2023; ALL
Rotating Equipment	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	APRIL 11 2023; ALL

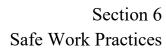




SO2 & H2S Awareness	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Safe use of Ladders & Scaffolds	09	15	17	MKC	09	01	18	MC	04	01	20	MC	FEB 14 2022; ALL	JAN 23 2023; ALL
Traffic Control	07	05	21	KC JR									JULY 19 2022; KC	FEB 13 2023; ALL
Truck Winching	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JAN 24 2022; ALL	JULY 8 2023; KC
Ventilation	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	AUG 24 2023; ALL
Equipment Isolation	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Excavator Operator	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Hoe Safety	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Rigging	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Soil Disturbance	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	MAY 29 2023; ALL
Towing	09	15	17	MKC	09	01	18	MC	04	01	20	МС	JAN 24 2022; ALL	APRIL 17 2023; ALL
Valves	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	JULY 8 2023; KC
Welding Cutting and Burning	09	15	17	MKC	09	01	18	MC	04	01	20	MC	APR 25 2022; ALL	SEPT 8 2023; ALL
Working Near Overhead Power	09	15	17	MKC	09	01	18	MC	04	01	20	MC	JULY 19 2022; KC	FEB 6 2023; ALL
Working with	09	15	17	MKC	09	01	18	MC	04	01	20	MC	SEPT 28	JUNE 14

MKC – MONTY & KATHERINE CISSELL
MC – MONTY CISSELL
KC – KATHERINE CISSELL
JR – JULIE RADOMSKE

WW – WARREN WOHLGEMUTH
ALL – Safety Meeting Team of workers and managers/supervisors.







### 6.2 Basic Safe Work Practices

### Bear Awareness

#### **Safety Precautions**

Practicing some basic precautions will aid immensely in avoiding encounters with bears. When you are working in a wilderness situation remember the following points:

- **A)** Work with a team and be loud: Whistle, talk, sing or carry a noisemaker such as a bell. Some crews carry compressed air horns about the size of a spray can and blow them at regular intervals to make their presence known. Most bears will leave the area if they are aware of your presence. Stay in open areas as much as possible and remain aware of what is happening around you. Do not wear headphones while listening to a portable tape player this will block out any warning noises, even the shouts of your companions.
- **B)** Observe the wind direction: Be especially alert if you are travelling into the wind. The bear may not pick up your scent and be forewarned of your presence. If you are working in dense brush or near rushing water, the bear may not hear your voices or a small noisemaker.
- *C)* Avoid dead animals and berry patches: These are prime food sources for bears. Circling crows or ravens often indicates the presence of a carcass.
- **D)** Be observant and watch for bear signs: Fresh tracks, droppings and new diggings are all signs that a bear is in the area. If you see fresh bear signs, leave the area.
- *E) Leave your dog at home:* Dogs infuriate bears while posing no threat to them. Your pet may run back to you for protection with an angry bear in hot pursuit.
- **F)** Never approach a bear: Especially a cub. The mother is usually close and will attack if she thinks her cub is in any danger.
- **G)** Keep a clean campsite: Nothing attracts bears like odors from food and garbage. Do not leave food, garbage, coolers, utensils or cooking equipment around your site. Lock food away in a vehicle or hang it between two trees at least four meters off the ground. Avoid smelly foods and if you go fishing at the end of the day, do not leave cleanings anywhere near your campsite. Garbage should be packed in airtight bags and taken with you when you leave. Do not bury garbage or food scraps; a bear can easily locate these and dig them up. Burning garbage is also not recommended.



### Cell Phone Use While on the Job

Protecting workers from injuries associated with the use of cell phones while operating a vehicle, cell phone use is strictly prohibited while operating heavy equipment.

- In the case that an employee is required to use their cell phone while driving, it is important to make driving your first priority.
- Whenever possible, let your voice mail take incoming calls.
- As per Alberta & B.C law, cell phones or any other hand held device may only be used when the use of a hands free device is available while driving.
- Texting or talking without a hands free device is not allowed at any time, unless your vehicle in park.
- Do not engage in stressful or emotional conversations
- Ensure you know your cellular phone and its features including speed dial and redial
- Ensure cellular phones are turned off when refueling.

## Cleaning Solvents & Flammables

Cleaning solvents are used in day-to-day work to clean tools and equipment. Special care must be taken to protect the worker from hazards which may be created from the use of these liquids. Wherever possible, solvents should be non-flammable and non-toxic.

The Area Foreman must be aware of all solvents/flammables that are used on the job and be sure that all workers who use these materials have been instructed in their proper use and any hazard they pose.

The following instructions or rules apply when solvents/flammables are used:

- Use non-flammable solvents for general cleaning.
- When flammable liquids are used, make sure that no hot work is permitted in the area.
- Store flammables and solvents in special storage cabinets.
- Check toxic hazards of all solvents before use. (SDS)
- Provide adequate ventilation where all solvents and flammables are being used.
- Use goggles or face shields to protect the face and eyes from splashes or sprays.
- Wear protective gloves to protect the hands.
- When breathing hazards exist, use the appropriate respiratory protection.
- Never leave solvents in open tubs or vats return them to storage drums or tanks.
- Ensure that proper containers are used for transportation, storage and field use of solvents/flammables.
- Where solvents are hazardous products, ensure all employees using or in the vicinity of use or storage are trained and certified in WHMIS 2015. Ensure all requirements are met.



### Compressed Air

The following safe work practices should be followed when using compressed air:

- Compressed air must not be used to blow debris or to clear dirt from any worker's clothes.
- Ensure that the air pressure has been turned off and the line pressure relieved before disconnecting the hose or changing tools.
- All hose connectors must be of the quick disconnect pressure release type with a "safety chain/cable."
- Wear personal protective equipment such as eye protection and face shields and ensure other workers in the area are made aware of or have restricted access to the hazard areas.
- Hoses must be checked on a regular basis for cuts, bulges or other damage. Ensure that defective hoses are repaired or replaced.
- A proper pressure regulator and relief device must be in the system to ensure that correct desired pressures are maintained.
- The correct air supply hoses must be used for the tool/equipment being used.
- The equipment must be properly maintained according to the manufacturer's requirements.
- Follow manufacturer's general instructions and comply with legislated safety requirements.

## Compressed Gas Cylinders

The following safe work practices should be followed when using compressed gas cylinders

- Storage areas should be located away from general traffic paths and vehicle paths.
- Storage areas should be divided and marked as areas for "Full" and "Empty"
- Appropriate measures must be taken to ensure that cylinders containing substances that could produce an explosive atmosphere are separated.
- Cylinders should have valve protection caps in place whenever they are not connected.
- When transporting cylinders, ensure that they are secured.

### COVID in the Workplace

The following safe work practices should be followed while government restrictions are in place to reduce the risk of transmission of COVID-19 among workers, visitor and the public.

- Be sure to remain up to date on current COVID protocols as outlined by the government of Alberta at alberta.ca/COVID19
- Workers with symptoms such as cough, fever, shortness of breath and runny noes or sore throat should complete the self-assessment outlined in SafeWork Practices: COVID Screening.
- Workers that have been diagnosed COVID19 or symptoms in alignment with COVID19 should remain home until symptoms resolve



- Maintain physical distance of 6 ft from other people, utilize masks when adequate distances cannot be maintained
- Maintain proper handwashing techniques

## Cranes, Hoists and Lifting Devices

Only authorized personnel are permitted to operate/use hoists, cranes, lifts, lifting equipment and man basket.

#### **Supervisor Responsibilities**

Ensures all operators of hoists, cranes, lifting equipment, and man basket are properly trained in the operation of the equipment.

- Provides training programs for use and operation of equipment.
- Maintains records of employee training.
- Maintains yearly inspection records.
- Ensures that the safe working load must be clearly marked on all lifting devices
- Ensures all lifting devices are clearly marked with the manufacturer's name, serial number and year of manufacture or shipment date
- Schedules yearly inspections by certified inspectors.
- Maintains an inventory of the below-the-hook rigging and lifting devices.
- Ensures that all equipment is inspected on a monthly basis and updates records.
- Witnesses load tests for new or modified equipment.
- Maintains an inventory of manually operated hoists (chain operated, lever operated)
- Reviews the lifting device logbooks for compliance (where applicable, ie: Saskatchewan)

#### **Employee Responsibilities**

- Inspects hoists, cranes, lifting equipment and man basket before it is used.
- Does not use malfunctioning or damaged equipment. Reports any defects or malfunctions to the supervisor immediately.
- Operates the equipment safely, and in accordance with operating instructions.
- Wears/uses appropriate protective/safety equipment at all times.
- Ensure control zones (e.g. hard hat areas) are set up where required.
- Maintains the lifting device log book (where applicable, ie: Saskatchewan)

#### **General Training Requirements**

- All operators will attend a training course on the specific equipment that they are required to operate. Only trained and competent operators will be operating the equipment.
- During the training course the operator is required to:
- Point to and explain the equipment controls.



- Perform all necessary equipment functions for the examining official.
- Explain all necessary safety procedures for the examining official.

#### **Operating Rules and Practices**

The operator shall ensure lockout/tag out of any equipment capable of endangering operation of hoists, cranes, or other lifting equipment in accordance with the company.

#### Hoist and Cranes, Excavators

- Visually inspect equipment before it is used. Report any defects to supervisor. Do not use equipment if it is defective.
- Ensure that the hoist or crane is not loaded beyond its rated load except for load test purposes.
- Workers should never stand or pass under suspended loads.
- Loads should never pass over workers. If a load must pass over workers a critical lift assessment shall be completed prior to commencement of a lift as a means of developing a practical alternative, or where no practical alternatives exists, ensure all safety measures are considered, everyone is effectively warned and the load is positioned to the ground as reasonably possible.
- The operator shall not engage in any activity that will divert attention while actually engaged in operating the crane or hoist.
- The operator is responsible for operation of the crane or hoist. In the event of obstructed view by the operator or as required, an appointed person will direct the crane operation by approved hand signals.
- The operator shall obey a stop signal at all times, no matter who gives it.
- Before leaving a crane or hoist unattended, the operator shall land any attached load, place controllers in the off position, and open the main line disconnect device of the specific crane.
- The operator shall not close the main switch until certain that no worker is on or adjacent to the crane, and all controllers are in the off position.
- If power goes off during operation, the operator shall immediately place all controllers in the off position. As soon as possible, any suspended load shall be landed or secured. Before the crane is put back into use, operating motions shall be checked for proper direction.
- Before the operator performs any maintenance work on the crane, the operator shall lockout and tag out the main switch in the de-energized position. Further details are given in Section 6 Safe Work Procedures, Lockout/Tag out Procedures and the equipment shall be maintained in accordance with Section 9, Preventive Maintenance and Inspection Program.

#### Lifting Equipment (below-the-hook rigging and lifting devices e.g. slings, chain slings)

- Visually inspect lifting equipment before it is used. Report any defects to the supervisor. Do not use equipment that is damaged.
- The weight of the load shall be within the rated capacity of the lifting equipment.
- Lifting equipment such as slings shall always be protected from being cut by sharp corners, sharp edges, protrusions or abrasive surfaces.





- Slings shall not be shortened with knots or bolts or other makeshift devices.
- Slings used in a basket hitch shall have loads balanced to prevent slippage.
- Lifting equipment shall be securely attached to their load.
- Hands or fingers shall not be placed between the lifting equipment and its load while the lifting equipment is loaded.
- Shock loading is prohibited.
- A sling shall not be pulled from under a load when the load is resting on the sling.
- Alloy steel chain slings shall have permanently affixed durable identification, stating size, grade, rated capacity, reach and serial number.
- Synthetic web slings shall have an affixed identification tag stating rated capacities for each type of hitch, size and serial number.
- Lifting equipment shall be stored properly after each use to prevent damage.

#### Man-basket

In the event that a worker must be hoisted by a man basket to perform their duties the following work rules and operating practices shall be observed;

- Man baskets shall only be used for the express purpose they are supplied for and no other operation.
- Visually inspect man-basket before it is used. Do not use man-basket if it is defective. Report any defects to the supervisor.
- Hoisting of the man-basket shall be performed by a qualified operator in a slow, controlled, cautious manner with no sudden movements of the crane.
- The man-basket shall have a permanently affixed plate which indicates the weight of the man-basket and its rated capacity.
- The man-basket shall not be loaded in excess of its rated load capacity.
- A meeting attended by the crane operator, signal person(s) (if necessary for the lift), employee(s) to be lifted and person responsible for the task to be performed shall be held before work begins to review the lift procedures and work at hand.
- The trial lift with the unoccupied man-basket loaded at least to the anticipated lift weight shall be made from ground level, or any location where employees will enter the platform to each location at which the man-basket is to be hoisted and positioned. This trial lift shall be performed immediately prior to placing personnel in the man-basket. The operator shall determine that all systems, controls, and safety devices are activated and functioning properly, that no interference exists, and that all configurations necessary to reach the work locations will allow the operator to remain under the 50 percent limit of the hoist's rated capacity.
- After trial lift the man-basket shall be inspected to ensure that it is secure and properly balanced.
   Personnel shall not be hoisted unless the following conditions are met:
- Hoist ropes shall be free of kinks
- The primary attachment shall be centered over man-basket
- Hoisting rope shall be properly fitted on drum and sheaves



- Personnel occupying the man-basket shall use a body harness system with lanyard appropriately
  attached to the lower load block on the overhaul ball or onto a structural member within the manbasket capable of supporting a fall impact for employee using the anchorage.
- Personnel shall keep all parts of the body inside the man-basket during raising and lowering
- Before personnel exit or enter a man-basket that is not landed, it shall be secured to the structure where the work is to be performed, unless securing it to the structure creates an unsafe situation.
- Tag lines shall be used unless their use creates an unsafe condition.
- The crane operator shall remain at the controls at all times when the man-basket is occupied.
- Personnel being hoisted shall remain in continuous sight of and in direct communication with the operator or signal person

### **Erosion Control**

Workers engaging in job tasks that require the disturbance of soil including clearing, stripping land and excavating must adhere to the following guidelines:

- Demonstrate that all reasonable and necessary precautions are taken to determine any existing underground facilities, by using One Call, obtain clearances from land owners and notify all affected where erosion control will occur.
- Area's will be marked prior to commencing work, to ensure workers are aware of the erosion control area by way of flagging, signage or any other effective means.
- Schedule a plan to minimize the amount of time that the bare soil is left exposed and to minimize the extent of soil exposure at any one time in order to reduce the amount of erosion and sedimentation that occurs.
- Job planning must be conducted pre-job, during construction, and after construction. Pre-job
  meetings must be held to plan for the least amount of disturbance as necessary and what control
  measures need to be put into place. Job planning shall be conducted during construction to ensure
  that erosion and sediment control measures are in place and the procedures are being followed.
  Post-job planning shall be in place to ensure that temporary controls have been removed and that all
  potential problem areas have been addressed
- When activities require a disturbance of the soil, the employer shall utilize erosion control devices to
  prevent erosion and ultimately to help prevent sedimentation. Examples of erosion control devices
  include: temporary seeding, temporary mulching, permanent sodding, erosion control blankets, and
  vegetative buffer strips.
- Entry and exit points for any water runoff must be controlled with the use of sediment control
  devices to prevent sediment from entering any waterways. Commonly, storm drain inlets are
  protected to prevent sediment from entering the storm drain. Examples of sediment control devices
  include: silt fencing, straw bales, storm inlet traps, sediment ponds, rock check dams, and
  intercepting berms.



- Employees that are responsible for erosion and sediment control devices must be competent in the
  design, installation, and maintenance of the devices. Training may be performed in-house or by a 3rd
  Party.
- Ensure excavation equipment is not permitted within 2 feet of a buried facility, until the facility has been exposed to sight with an approved method. Ensure that no mechanical excavation within the hand exposure zone of a buried facility.
- While piling soil ensure the leading edge must be a least 1 meter away from the edge of the
  excavation and the slope is at an angle not more than 45 degrees.
- If a worker is required to enter a trench more that 1.5 meters deep, there must be a safe point of entering/exiting that is no more than 8 metres from the worker.
- Workers will perform an Equipment Service Record on each Erosion control device at the beginning
  of each shift. Each inspection will be documented on the Equipment Service Record providing the
  date, employee and any maintenance performed on the control devices.

### **Ergonomics**

Workers that may be at risk of developing musculoskeletal injuries in their day to day tasks should utilize training programs, safe work procedures, and ergonomics equipment. To reduce the harmful effects of repetitive activities:

- Provide workers with ergonomics training in their specific tasks and day-to-day responsibilities.
- Follow safe work practices and procedures designed to aid in the proper body positioning while performing job tasks
- Utilize equipment that is designed to reduce the harmful effects of activities
- Change activities and include rest periods should be utilized to allow recovery time
- Regularly review job tasks and activities to address ergonomic hazards.

### **Defective Tools**

Defective tools can cause serious and painful injuries. If a tool is defective in some way, DO NOT USE IT!

Be aware of problems like:

- Chisels and wedges with mushroomed heads.
- Split or cracked handles.
- Chipped or broken drill bits.
- Wrenches with worn out jaws.
- Tools which are not complete, such as files without handles.

Air, gasoline or electric power tools require skill and complete attention on the part of the user even when they are in good condition. Do not use power tools when they are defective in any way. Watch for problems like:



- Broken or inoperative guards.
- Insufficient or improper grounding due to damage on double insulated tools.
- No ground wire (on plug) or missing cords to standard tools.
- The on/off switch is not in good working order.
- The tool blade is cracked.
- The wrong grinder wheel is being used.
- The guard has been wedged back on a power saw.

#### To ensure safe use of power tools, remember:

- Never use a defective tool.
- Double check all tools prior to use.
- Ensure defective tools are tagged for repair.

## **Driving Safety**

The operating of all motor vehicles must be performed according to all vehicle codes, traffic laws, company procedures and manufacturer's recommended operating guidelines.

#### The following responsibilities for driving include:

- Ensure you have a valid operator's license.
- Pre-plan your route taking into consideration the road and weather conditions. When on a long trip be sure to consider availability of services (i.e. gas stations).
- Ensure that you have allowed yourself adequate time to get to your location.
- Plan to travel during the daylight hours if possible.
- Be aware of wildlife issues if travelling during dusk or dawn.
- Be conversant with traffic laws and regulations.
- Drive defensively.
- Back in when practical.
- Ensure the vehicle has an emergency road kit.
- Ensure you are not under the influence of alcohol or drugs.
- Avoid driving when fatigued. Ensure that breaks are taken as needed.
- Ensure seatbelts are worn at all times when driving.
- Be familiar with the vehicle and its capabilities.
- Avoid offering rides to strangers or hitchhikers.
- Perform a "walk around" inspection prior to traveling.
- Use good judgment and understand the basic recovery skill appropriate to the vehicle you are driving.
- In winter, clear snow from all windows, lights and mirrors.
- Avoid using cruise control on icy roads.



- Accelerate and brake gently to reduce skids or spinouts.
- Ensure winter clothing does not restrict movement, vision or hearing.
- Monitor weather reports.
- Reduce nighttime driving speed by 10 km/hr on all roadways

#### Journey Management

Safe driving practices should be encouraged at all times. Employees who drive in the course of their job duties have the responsibility to be familiar with and observe company policies and procedures concerning driving, inspections, maintenance and the reporting of accidents.

The Journey Management Plan will be reviewed with workers required to travel before they perform any driving on company business. A copy of the plan will be readily available at the workplace and the worker will carry a copy of the plan with them during their travels.

Journey Management is an important tool in ensuring safety while on the road. To minimize the risk associated with road journeys, they should only be taken when necessary. To reduce the amount of driving for improved safety and efficiency, it is recommended that one tries to complete multiple tasks in single trips, perhaps instead of meeting with someone, determine if the meeting can be done over the phone instead or when reasonably practice consider safer methods of travel (air, train, etc.). To reduce road travel incidents, increase safety for yourself, your passengers and other drivers on the road follow these guidelines:

- Document Pre-trip inspections and/or visual checks as required for the type of vehicle being driven. All trucks, tractors and trailers shall be inspected every 24 hours.
- Any defects found during inspections must be documented.
- Ensure proper equipment is in place prior to departure, buggy whips, lights, decals, radios, towing kits and any other special equipment required by clients.
- Only the use of hands free devices is acceptable while driving. All drivers must carry a reliable method of communication (cell phones, CB radio, etc.) in case of emergency
- Secure loads adequately prior to departure
- Investigate possible adverse road conditions
- Obtain complete driving directions prior to travelling. Inform a co-worker or spouse of your intended travel route, establish a check in procedure for long trips.
- Abide by the company Driving & Vehicle Policy as well as any posted or legislated rules of the road and/or private road use agreements
- Drive to the conditions of the road.
- Remain aware of hazards including wildlife and poor visibility due to sun or night time driving conditions
- Utilize proper calling procedures on radio controlled roads
- Roadside emergency kits should be kept in all vehicles used for highway travel. These kits shall
  include equipment to assist in a roadside emergency such as;
- water, booster cables, first aid supplies, blankets, warning triangles, flashlights, etc.. In winter months, carry sandbags and a shovel.
- Take adequate rests breaks during long journeys



 Drivers must complete and comply with their log book and the 13 driving/14 on-duty hours of service requirement when required

Journey Management should work hand in hand with the Working Alone Policy. Any job, including travel that requires a worker to be alone for a period of more than 3 hours should have a preplanned call procedure which may be developed on a case by case basis. All employees shall notify their supervisor or another individual who is not traveling with them of their travel plans. This includes where they are going, when they should be getting there, and when they plan to return.

Road use agreements are in use on private road way. As a driver it is your responsibility to know the rules of the road and comply with those rules at all times.

#### RADIO CALLING PROTOCOL (Radio Controlled Roads)

#### **Safety Considerations**

- Losing track of your location
- Using wrong radio frequency/channel
- Losing track of other vehicles
- Walking over' other calls
- Meeting on-coming vehicle without radio
- Being distracted
- Others not following radio calling protocol
- Inadequate Signage
- Unnecessary radio chatter
- Radio dead zones
- Improperly functioning radios
- Inconsistent reference to road names

#### **Road Safety Requirements**

- Calling 'loaded' indicates that you will be travelling out on the radio controlled road.
- Calling 'empty' indicates that you are entering onto a radio controlled road.
- Calling 'clear' or 'off' indicates that you have reached your destination either entering or exiting the radio controlled road.
- At the beginning of a radio controlled road there will be signage that indicates the channel you need to be using, while travelling on that specific road.



• Users must call the travelling direction (empty/loaded), type of vehicle, kilometer marker and road name. While beginning your travel into a radio controlled road, you must call 'empty'. Beginning at km 0 and continuing each km until you reach your destination.

i.e.) Empty pickup km 0(1, 2, 3, 4...) on the ghost

Once you have reached your destination, you must indicate to all other drivers that you are 'off' the road

i.e.) Off pickup km27 on the ghost

\*Same protocol is followed once you begin your journey back out. However you must call 'loaded'

i.e.) Loaded pickup km 27 (26, 25, 24, 23...) on the ghost

When you reach the entrance of the radio controlled road, you need to indicate to all other drivers that you are clear of the road.

i.e.) Clear pickup km 0 on the ghost

Additional information to consider

- Keep your speed to the posted limit
- Avoid all noise distractions in your vehicle AM/FM radio's, cell phone, passengers
- Your radio is used ONLY for calling your location. Avoid idle chit chat and foul language.

#### Vehicle Breakdowns

- Signal, slow down and move off the road.
- Turn on hazard warning lights.
- Set out flares or warning triangles.

## Fatigue Management Practice

The companies recognizes that fatigue has a significant influence on health and safety, as workers that are too fatigued to work safely may present a hazard to themselves and others. The company provides fatigue management training during the orientation process and will strive to increase awareness about fatigue, manage the risk factors and hazards, and prevent related injury and illness.

#### Hazards

Sleep deprivation leading to reduction in ability to do the job and awareness of hazard exposure.

#### **Corrective Actions**



If you notice you have signs of fatigue, don't ignore them! Take immediate action to make sure your fatigue doesn't make you a hazard to yourself or others. Work may have to be delayed and/or rescheduled. Talk to your supervisor who may reassign you to a less risky task or let you rest.

Temporary measures that can be used to deal with fatigue:

- Take a nap this is the best treatment for fatigue! Sleeping for 20 minutes may refresh you enough
  so you can keep working safely. If you're driving, make sure you get off the road to a well-lit area
  (not just the shoulder) and have good ventilation in your vehicle.
- Take a break stop what you're doing, walk around or exercise, and get some fresh air. Sufficient
  rest breaks are needed for workers to allow for rest and recovery time. Depending on the location of
  work or overnight accommodations, this may also include access to proper nutrition and
  opportunities for physical activity.
- Make yourself uncomfortable sit straight in your chair, and if possible, keep your environment cool, well ventilated, a bit noisy, and brightly lit. If you're too comfortable, your alertness will decrease.
- Have a snack stay hydrated, eat light meals, and avoid sleep-inducing foods and alcohol. Don't trust caffeine for alertness whether it is in coffee, tea, energy drinks, pop, chocolate, or pills. Caffeine takes about half an hour to have any effect, lasts only a short time and leaves you even more tired when it wears off. Eating properly gives you energy.
- Change it up break any monotony you're experiencing. For example, if you're driving, change the radio station often, sing along, or talk to yourself. But please don't use your cell phone while driving!

Stimulate your mind – do something else that is more interesting. Talk to a co-worker or listen to talk radio.

The best ways to prevent fatigue are:

- Get enough quality sleep make time for effective sleep during your time off and catch up on your sleep debt if necessary.
- Eat properly eat healthy foods that give you good energy and try to eat meals and snacks at the same time every day.

The company will ensure to implement all reasonable control and management measures to control fatigue; such as setting work hour limitations and will control job rotation schedules to control fatigue, allow for sufficient sleep, and increase mental fitness. Appropriate work scheduling should take into consideration the amount of rest between workdays, shift work, on-call time, traveling across different time zones, etc.

#### Work Restrictions due to Fatigue

Workers must never operate motor vehicles and/or heavy equipment while excessively fatigued.

## Frostbite & Freezing

During the winter, work may be conducted in very cold temperatures. Workers should prepared to work in cold temperatures, wearing suitable winter outerwear to protect the body from exposure. Protective gear





should include, Winter footwear, insulated jacket, gloves head ware. All outerwear should be compatible with required personal protective equipment. Special attention must be given to exposed body parts, as extreme cold can easily and quickly result in the freezing of bare skin.

Frostbite is seen as a sudden "whiteness" of the skin and if serious, feels firm to the touch.

The principle of First Aid treatment is to restore heat and blood flow gradually. Rapid warming by applying external heat must only be done by experienced medical personnel in a hospital. There should be no attempt to thaw a frozen part unless the casualty can remain in a warm atmosphere. In most cases of serious frostbite, it is safest to allow the part to remain frozen during transportation. If a frozen limb is thawed and then refrozen, there will be little chance that the limb can be saved.

#### **Treatment of Superficial Frostbite**

- Apply firm, steady pressure with a warm hand. Blow hot breath on the spot or hold frostbitten fingers motionless in the armpits.
- Do not apply snow, cold water or direct heat to the affected parts.
- Do not rub or chafe the affected parts.
- Provide the injured person with shelter and general warmth.

#### **Treatment of Deep Frostbite**

- Injured person must be removed immediately by stretcher, if possible, to a medical facility.
- Injured person should be kept dry and protected from the cold to prevent worsening of the injury.
- No attempt should be made to thaw a frozen part unless the injured person can remain in a warm atmosphere and early medical aid can be provided.

### Grinding

Severe injury may occur if proper protective equipment is not used and properly maintained. Check the tool rest for the correct distance from the abrasive wheel, maximum 1/8 inch or 3 mm.

- Replace the grindstone when adjustment of the rest cannot provide 1/8 inch or 3 mm clearance.
- If the wheel has been abused and ground to an angle or grooved, reface the wheel with the appropriate surfacing tool.
- Protect your eyes with goggles or a face shield at all times when grinding.
- Each time a grinding wheel is mounted, the maximum approved speed stamp on the wheel bladder should be checked against the shaft rotation speed of the machine to ensure the safe peripheral speed is not exceeded. A grinding wheel must not be operated at a peripheral speed exceeding the manufacturer's recommendation.



- The flanges supporting the grinding wheel should be a maximum of 1/3 the diameter of the wheel and must fit the shaft rotating speed according to the manufacturer's recommendation.
- Bench grinders are designed for peripheral grinding. Do not grind on the side of the wheel.
- Do not stand directly in front of the grinding wheel when it is first started
- Wear respiratory protection when grinding for extended periods of time or while grinding silicaproducing surfaces such as concrete.

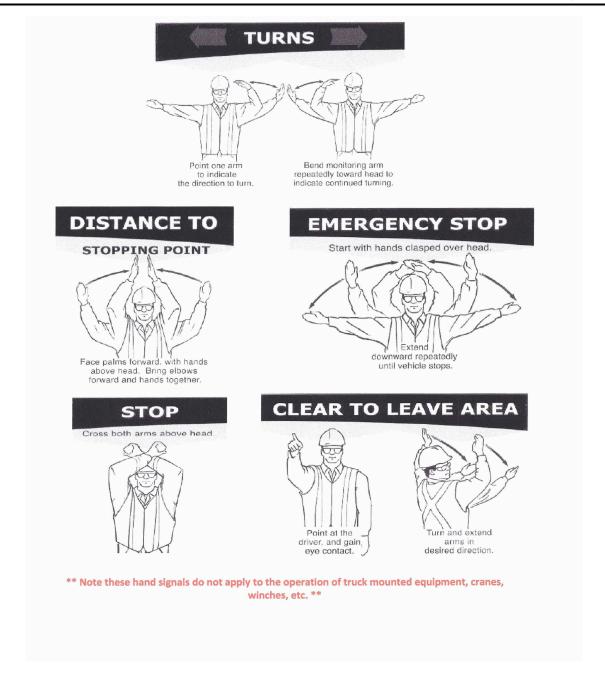
### Hand Power Tools

If unfamiliar with equipment, refer to operating manual and safety precautions.

- Keep work areas clean.
- Don't force the tool.
- Dress properly. Do not wear loose clothing or jewellery, as they can be caught in moving parts.
- Use safety glasses and/or face shield while cutting or drilling.
- Use a face or dust mask if cutting or drilling operation is dusty.
- Do not abuse the machine's cord by pulling or yanking it to disconnect from the receptacle.
- Ensure work is securely held in place by use of clamps or a vice.
- Maintain tools in good condition. Keep tools sharp and clean for better and safer performance. Ensure that any moving parts are guarded. Do not use power tools if they are defective or the safeguards have been tampered with. Removing safe guards is specifically prohibited.
- Keep hands away from cutting and drilling area while machine is in motion.
- Isolate equipment from power source before servicing.
- Watch for problems such as:
  - Broken or inoperative guards.
  - o Insufficient or improper grounds due to damage on double insulated tools.
  - No ground wire on plug or cords.
  - The on/off switch is not in good working order.
  - The wrong grinder wheel is being used.
  - The guard has been wedged back on a power saw.

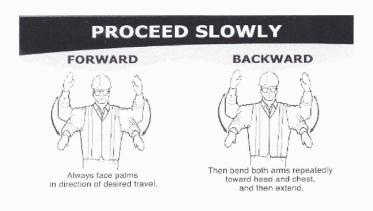
## Hand Signals







The operator and the guide share the responsibility for safe equipment movement. The following basic hand signals are based on *Enform's IRP 12: Hand Signals for Directing Vehicles* for use on ARC worksites:



### **Heat Stress**

During summer months, work may be performed in very warm and humid temperatures. Precautions should be taken to prevent heat stress and make working in the heat safer and more comfortable.

It is important to treat heat stress as soon as symptoms are observed. Left untreated, heat stress could turn into a heat stroke, which is a lot more serious. Working or exercising in hot conditions or weather without drinking enough fluids is the main cause of heat stroke.

#### **Symptoms of Heat Stress**

- Excessive thirst
- Weakness
- Headache
- Fainting
- Dizziness, confusion
- Nausea



#### **Symptoms of Heat Stroke**

- High body core temperature
- Hot, red, dry skin
- Rapid pulse
- Rapid, shallow breathing
- Headache
- Confusion, strange behavior
- Possible loss of consciousness

#### **Precautions**

- Drink plenty of fluids, including potable water, fruit and vegetable juices. Avoid caffeine and alcohol, these will dehydrate you faster.
- Ensure air conditioning is working properly if operating equipment or vehicles or working in shacks.
- Ensure windows can be opened to help improve ventilation if necessary.
- If working outside, take regular breaks in the shade, or a cool area.
- Wear loose fitting, breathable clothing under coveralls. Remove tight and unnecessary clothing as this holds more heat against your body rather than letting it escape.

If you think you or someone else has symptoms of heat stress, worker must be removed from further exposure and treated by a first aid attendant/medic immediately.

The companies provides and maintains an adequate supply of cool potable water close all work areas for the use of a heat exposed worker. All trucks must have a case of water available to all workers when working outside.

## Housekeeping

Good Housekeeping plays a major role in the prevention of accidents within an organization. In order to minimize the physical and environmental hazards within a working area, the following practices should be adhered to:

- All garbage should be put in proper covered containers and emptied in designated destinations as it constitutes a fire hazard.
- All surplus materials should be returned to the designated storage area at the end of each shift.
- Tools and materials must be cleaned and put away after use.
- Oily rags must be placed in approved metal containers with lids and the containers labeled as such.



- Hazardous materials are well marked and stored safely. Leaking containers must be repaired and/or replaced; spills must be cleaned up promptly and solvent soaked rags or other absorbents must be deposited in approved metal containers and removed daily from the work areas.
- Workers should ensure wash-up and washroom facilities clean and free of debris.
- Special attention must be given to the maintenance of clear ramps, walkways, floors and stairwells in order to remove the potential for slipping and falling hazards. All areas must remain clear of slipping and tripping hazards at all times.
- Racks and bins provided in designated areas for the storage of materials and supplies must be on firm level ground and properly constructed to support the weight of the material that is stored.
- Worksites should be tidy and left in the same condition or better than you found it in.

### Housekeeping – Living Quarters

Housekeeping is not only important to keep all workers safe on the worksite, it is important in living quarters as well. Well sites should be kept clean for the health and safety of all staying there, and out of respect for the company and others that are staying there.

- Keep floors clean of mud, dirt, oil etc. Remove boots at the door; do not walk across floors with dirty footwear.
- Put all garbage in containers, and remove when full. Do not leave overflowing containers in the shack. Inadequate removal of garbage yields fire hazards as well as attracts rodents.
- Keep storage and living areas neat and organized. Keep doors free of obstructions. Cluttered shacks and obstructed doors are a safety hazard in an emergency.
- Keep bathroom area clean and equipped
- Use effective pest control. Do not leave food or garbage out, use traps and make sure doors close properly. Mice in particular pose a health risk and should be kept out of living areas.
- Keep food areas clean and maintained. This will help aid in pest control.

#### When leaving job:

- Remove ALL personal belongings.
- Clean out all food from refrigerator and freezer.
- Remove garbage.
- Leave shack clean, and in better condition than when you arrived.

Keeping the shack clean and organized will help make the experience of staying there more enjoyable for all those involved. It will also enable a quick and safe exit in the event of an emergency.

### **Electrical Safety Basics**

• Employees should have basic electrical safety training to ensure proper identification of electrical hazards as well as proper electrical emergency response procedures.



- The design, construction, installation, operation and maintenance of all electrical equipment must meet Canadian Electrical Code Standards.
- Electrical extension cords should be approved for the intended use, installed with appropriate devices, have a grounding conductor and free of any defects.
- When used outdoors, in damp or wet locations, portable electrical equipment must be protected by a CSA approved ground fault circuit interrupter (GFCI), class A, installed at the receptacle or on the circuit panel, unless another means of protection is provided.
- Store combustible materials away from electrical equipment.
- Turn off the electrical power before changing a light bulb.
- Any damaged electrical devices should be removed from service immediately and discarded.
- Employees/equipment working around energized high voltage electrical equipment or conductors must keep a minimum approach distance (see table below)

Voltage	Minimum a distan	-		
Phase to phase	Metres	Feet		
Over 750 V to 75 kV	3	10		
Over 75 kV to 250 kV	4.5	15		
Over 250 kV to 550 kV	6	20		

### Power Sources & Power Lines

When performing electrical work, always take appropriate precautions against the hazards likely to be encountered in the work area. In particular:

- Remember that any electrical/hot work must be done only by qualified electricians and must be trained in high voltage safety.
- Before starting work on electrical equipment, lock out and tag any source of power that could be energized.
- All electrical equipment with the following switchgear must be locked out and tagged:
- 110 to 220 volts; 480 volts; 2400 volts
- Before doing any hot work on electrical equipment, ensure that the area is gas free.
   This can be done by performing a combustible test on the area.
- Do not open an explosion-proof fixture until a hot work permit has been issued.
- Always use safety equipment and adequate personal protective equipment when work is being done involving high voltages.
- Treat equipment that is not rated for use in hazardous areas as hot work.



#### Underground Power Cables, Working Near

- No person shall commence any excavation in the vicinity of underground power cables unless he proceeds in accordance with this section.
- A person described in section (1) shall examine the site for warning signs and/or electrical equipment indications to determine if an underground power cable is present and if this cannot be determined, the local power authority shall be contacted for assistance.
- Where underground power cables are present at the site, a person shall accurately determine their location.
- From detailed plans or drawings, if available.
- By testing with location equipment and flagging by the power authority.
- The power authority operating the underground system shall be notified where work is to be carried out within 1 meter of the underground power cables.
- The power authority shall provide qualified personnel to direct the work and ensure that it is carried out in a safe manner.
- A person shall not do any work unless the power authority has authorized it.
- A person who has been given the authority to do the work shall remove the 0.2 m of earth adjacent to an underground power cable by a hand digging method acceptable to the power authority.
- If an underground power cable has been de-energized and grounded, other excavating methods may be used subject to the approval of the power authority.

#### Power Lines, Working Near

In safe work planning, it is essential to determine that factors such as buildings, landscaping or spoil piles have not altered the clearance. There may be several services mounted on utility poles such as:

- More than one high voltage circuit.
- Low voltage power lines.
- Telephone cables.
- Cable TV cables.

In developing a safe work plan, consider such factors as:

- Distance from the overhead lines should be no less than 7m
- Scope of work
- Type of excavation, hoisting or other equipment that will be required.
- Height and reach of equipment.
- Placement of equipment.
- Equipment or material loading/unloading.
- Worker competency.
- Ground or earth condition.
- Interruptions to utility service.
- Hazard to the public.
- Use of ladders, pipe and other conducting materials.



- Need to notify utility owner.
- Need to communicate all hazards to all workers and subcontractors.
- Changing conditions and other hazards that are present.

Burns are the most common electrical contact injury. Electricity can cause severe burns at points of entry and exit. Although entry and exit wounds may be small, bone and muscle can be extensively damaged. Electrical contact passing through the heart can cause the heart to stop beating.

The effects of an electrical contact are determined by:

- How much current is flowing in the body?
- The path of current through the body.
- The length of time electricity takes to pass through the body.

If equipment makes accidental contact with an electrical conductor, the operator must try to remove the machine from the contact without causing further damage, such as pulling power lines to the ground. In most cases, this can be accomplished by moving the boom of the machine. If the machine cannot be moved, the operator should stay on the machine, warn others to stay clear and ask someone to notify the electrical power company.

In case of an underground contact during excavation, remove the bucket from the ground. Keep out of the excavation and do not touch the cables.

Only as a last resort should the operator leave the machine. This might include a machine that is on fire or some other type of emergency. If the operator must leave a machine that is in contact with an electrical conductor, he must NOT, under any circumstances, step down and allow part of his/her body to be in contact with the ground.

Because of the hazardous "Step Potential" on the ground, he/she should place his/her feet together and hop away from the machine. Once safely away from the machine and conductors, the operator has the following responsibilities:

- i. To protect others by warning them and not allowing them to approach the energized equipment.
- ii. Call the electrical utility company for help and shut off the electrical power.
- iii. Inform Alberta Labor.

#### Portable Lighting Precautions

Where electrical hazards exist because of dampness (as when boilers are being cleaned), portable lighting units should be used. The portable lighting units should have heavy-duty cords with an isolating step-down





transformer and a low-voltage secondary inserted in the line. The voltage should be as low as practical and must not be above 32 volts.

#### **Bonding and Grounding**

The usual precautions taken to avoid static electricity "sparking" is grounding or bonding. The term "bonding" and "grounding" should not be used interchangeably as the two processes have distinctly different functions.

- Bonding is keeping the objects connected electrically so that there is no difference in electrical potential between them and therefore no sparks.
- *Grounding* is dissipating any electrical charges into the ground or into some other grounding conductor.

Grounding and bonding are effective only when applied to corrective bodies. Improperly grounded tools or equipment can create a shock. The correct tools, devices and properly trained personnel must be available on site.

Bonding and grounding systems should be checked regularly to ensure that they are in good mechanical condition. To discharge potential static build-up from clothing, workers should ground themselves before starting work.

#### Static Electricity

Sparks resulting from the accumulation of static electricity can cause fires. A static charge can be generated by friction resulting from:

- Oil passing through a pipeline.
- Liquid being poured from one container to another.
- The moving belts of fly wheels.
- Rubbing clothing.
- A blast of sand.
- Steam or hydrocarbons rushing through a hose or pipe or issuing from open-end pipes.

Static electricity can also be caused by the flow of air, vapor or water. The hazards of static electricity are more severe in dry, cold weather. When there is humid weather conditions, most surfaces are coated with a film of moisture which makes them good conductors that drain off static charges.

#### Electrical Insulation

When working on conductors, cables or other energized devices, place an insulating material between the worker and the grounded device to keep any body parts from providing a path of electric current. When working on damp or wet surfaces, use extra insulation to prevent body parts from coming in contact with the moisture.

#### **Extension Cords**

Do not use an extension cord in a hazardous environment until:



- The area has been checked and certified as being gas free.
- A hot work permit has been issued.

Use only extension cords that have a male explosion proof pin and sleeve at one end and a female standard U-groove plug at the other end. Use cheater cords no longer than 3 feet long when working in a hot work or restricted area. Ensure that the receptacles are explosion proof before plugging cords into them.

## **Equipment Isolation**

Before any repairs or modification work is to begin on equipment, pipes or pipelines, ensure that a blind flange is installed to prevent harmful substance from entering the area. Ensure that the blind flange is of sufficient rating according to engineering specification to withstand the highest possible pressure that may result. If a blind flange is installed, it must be clearly marked. Written procedures must be available to insure the worker on the purging method and medium to be used, the use of a "blind list" to ensure placement and removal of the blinds and step-by-step instructions on performing the job.

### Excavating To Expose Pipelines Or Buried Utilities

Due to the extreme dangers involved in working around buried utilities, the following procedures are to be used to improve the safety for equipment operators when stabilizing or excavating is being performed.

Ground disturbance is applicable under the following situations as defined by:

- OH&S: The ground is disturbed if a work operation or activity on or under the existing surface
  results in a disturbance or displacement of the soil, but not if the disturbance or displacement is
  a result of
  - i) Routine or minor road maintenance.
  - ii) Agricultural cultivation to a depth of less than 450 mm below the ground source over a pipeline, or
  - iii) Hand digging to a depth of no more than 300 mm below the ground surface, so long as it does not permanently remove cover over a buried facility.
  - iv) A search of a 30 meter radius from where the ground disturbance is taking place.
- 2. Pipe Line Act:
  - i) Any depth over a pipeline.
  - ii) Anything over 30 cm if it reduces the initial cover over a pipeline.
  - iii) Cultivation over 45 cm.
- 3. Best Practices: Any activity that disturbs the earth.



#### Before beginning any ground disturbance:

1. Call Alberta One Call.

Not all owners of buried facilities are members of Alberta One Call. A search is very important. Any facility owners that are not members of Alberta One Call must be contacted directly.

- 2. Search an area of a 30 m radius from where the ground disturbance is to be conducted.
- 3. Contact Alberta One Call and the Owner if any pipeline is found within 30m of the ground disturbance or any other facilities that may be affected by the ground disturbance.
- 4. Arrange for locates if you are within the 30m control zone of a pipeline or any other facility that may be affected by the ground disturbance. Obtain and keep your locate slip for the duration of the job.

Locate requests must be given at least 2 business days and valid for 14 days and remain in place for the entire duration of the job. If at the end of 14 days the owner of the facility is satisfied that the locates have not been disturbed, the owner may extend the life of the locates another 16 days, for a maximum of 30 days. If the job is still not done at the end of thirty days, new locates must be requested. When the job is complete, all locate marks must be removed.

If locate marks are moved or disturbed, they must be replaced. If you are ever in doubt of the accuracy of the marks, request a new locate.

5. If any work is within the right of way of a facility, permission must be obtained from the owner and the facility must be day lighted.

#### Right of ways:

Pipeline-5 meters on each side of pipeline centerline.

All other facilities- One meter on each side of pipeline centerline.

Some high voltage electrical lines may have a right of way of greater than 1 meter.

6. Anytime a ground disturbance runs parallel to a buried facility and within the right of way, day lighting may be required at regular intervals to the satisfaction of the owner.

Day lighting must be done under the supervision of the owner. And no mechanical excavation can be done within 60 cm of a pipeline or any depth underneath a pipeline until the pipeline is day lighted and must be done under the direct supervision of the owner.

#### Acceptable forms of day lighting:

Hand digging with a shovel.

Hydro-vac or air vac.

Other Methods acceptable to the owner

7. Before backfilling, notify the owner within 24 hours. Backfilling must be done under the supervision of the owner. Return site to original condition.



### Ground Disturbance – Manual or Mechanical

#### **Excavations / Trenches**

To set out safe work practices that will minimize risk to personnel and property for operation that includes the disturbance of soil by ANY means. Excavation is an everyday practice in our business. The risk of injury, fatality and/or property damage is always present when heavy equipment is in operation. These safe work practices are designed to minimize those ever-present risks. As such, Soil Disturbance practices will be reviewed as necessary.

#### **Definition**

Any work, operation or activity that results in a disturbance of the earth, including, without limitation, excavating, pile driving, digging, trenching, plowing, drilling, tunneling, auguring, backfilling, blasting, topsoil stripping, land leveling, peat removing, quarrying, clearing and grading.

Acquire the most current Owner supplied surveyed drawings

**Note:** Owner supplied drawings showing location of underground lines and equipment is to be used as a guideline only. If you suspect underground lines, cables etc. are close to your excavation site, have the site electronically surveyed to locate lines that may be close. Never assume that the drawings are accurate (One-Call / First-Call).

- Contact the Owner 48 hours in advance.
- Ensure you have an excavation work permit.

Make yourself completely familiar with the excavation site including buried pipelines, cables, conduits or foundations. Ensure a search of 30 m on either side of the excavation site has been completed (by owner) and that all identified underground pipelines, utilities and foundations have been located and marked.

For mechanical excavations operator should plan out placement or location for excavated material. To do this the operator should consider the OH & S trenching regulations which outline trench depth, slope and spoil pile restrictions.

Work with mechanical excavation is not permitted within the hand expose zone of a buried facility until the buried facility has been exposed to sight by either hand digging, a non-destructive technique approved by the owner or an equivalent method. The hand exposed zone is considered to be the strip of land 1 meter parallel to each side of the buried facility. If the facility is a high pressure pipeline, the zone is considered to be 5 meters parallel to each side of the pipeline.

Before a worker enters an excavated area more than 1.5 meters in depth where he/she is closer to the wall or bank than the depth of the excavation. You will ensure that the worker is protected from cave ins or sliding materials by: cutting back of the walls of the excavation to reduce the height to not more than 1.5 meters the installation of temporary protective structures or a combination of cutting back the walls and the installation of temporary protective structures. Ensure temporary protective structures in an excavation over



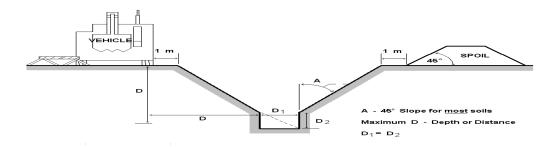
3 meters in depth are designed and certified by a professional engineer. You will also supply a safe means of access and egress (e.g. ladders, ramps, etc.) for workers prior to entering the excavation site.

# Note: For cutbacks and spoil pile placement and sloping, refer to OH & S trenching regulations (sections 169-174).

Where a foundation may be affected by an excavation, the foundation is supported before proceeding with the work by a temporary protective structure designed, constructed and installed in accordance with the specifications of a professional engineer.

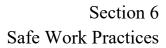
Ensure lose materials are scaled or trimmed away from the sides of an excavation where workers are or will be present. When installing /removing shoring, stringers or bracing refer to refer to OH & S trenching regulations (sections 169-174).

- Vertical not to exceed 1.22 meters
- Slope not to exceed 45 degrees or 1 to1 angle or greater depending on soil conditions
- Spoil pile to be at least 1 meter back from excavation
- Spoil pile to be 45 degrees to horizontal
- Engineering required when
- Exceeding 6.1 meters in depth.
- Adjacent to structures.
- Subject to vibration or hydrostatic pressure.
- Hard barricades or snow fence used to properly identify holes and or excavation



#### Procedure to follow in the event of contact with an underground facility:

- 1. STOP any soil disturbance activity (including moving the bucket) one it has become known that a facility has been hit.
- 2. SECURE the site.
- 3. NOTIFY the Site Supervisor who will then notify the owner/operator of the underground facility with the location where the contact occurred and the resulting damage.







### Heavy Equipment Operation

Only qualified workers may operate company equipment. Training to provide qualification may include on the job training or other third party certification.

#### **Materials Required:**

Personal Protective Equipment; Fire Retardant Coveralls, Gloves, Hard Hat, Steel-toed Boots, Hearing & Eye Protection. Track Shovels, Grease Gun.

#### **Supervisor Responsibility:**

- Supervisors shall verify that operators are capable and qualified to operate equipment before allowing the equipment to be operated unsupervised.
- Ensure Equipment Maintenance and Inspections have been performed as per schedules.

#### Worker Responsibility:

- Operators must perform a pre-operational check of their equipment prior to operating so regular repairs can be
  performed. Maintenance will be scheduled regularly and equipment inspections must be up to date. They should also be
  familiar with the equipment maintenance and operational requirements, report any defects or accidents promptly and
  shall not operate any equipment that is not safe.
- Equipment shall be secured against unintentional movement when not in use by applying the parking break or other breaking device.
- Operators shall wear seatbelts in equipment as provided.
- Operators shall keep their windshield, windshield wipers, side windows and mirrors clean and adjusted as required.
- When mounting or dismounting, use three point contact. Do not jump from the equipment.
- Always check to the rear before backing up. Use spotters if available. Make sure that the back-up alarms are working.
- Choose the safest place to park equipment. Avoid parking in other people's blind spots.
- Wear appropriate personal protective equipment.
- Be aware of the location of the fire extinguishers on your equipment and make sure they are fully charged and have been inspected in the last year.
- Operators should be aware of personnel on foot in work zones. Use only approved hand signals. (see hand signals sheet)
- Use a trailer whenever possible to transport an excavator. Make sure there is room for the scissor neck of the trailer to retract.
- Before operating the equipment, check the area for hazards and move any moveable obstructions.
- BE AWARE of overhead power lines and keep your distance from them.
- DO NOT leave buckets or booms elevated when the equipment is not in use. Always lower to the ground.
- NEVER allow anyone to work under a raised arm of equipment in the air.
- NEVER transport wheeled equipment that can be transported by towing safely.
- NO personnel shall be allowed to ride anywhere on the equipment except for in the cab. The cab protects workers from hazards including falling objects.



## Heavy Equipment Operation - Mulcher

Mulcher can propel debris for 100 meters. Always be aware of what is ahead of you when mulching including other equipment, workers, roads, buildings etc. Plan work to face away from such features to the extent possible.

- STOP MULCHING if anyone comes within 100 meters of the front of the mulcher or within 40 meters of the side of the mulcher. Do not resume until such visitors are aware of the risk of debris contact.
- Always be sure that the mulching drum is not touching the ground before starting power unit engine.
- Slope limit for tracked equipment is 40%. When working on any significant slope up to 40% ensure that the mulcher travels straight up and down slope unless aided by a bladed trail.
- Mulching may be carried out on slopes between 40 and 45% provided that such areas are short and specific safe work procedures are developed by the supervisor and operator taking into account the following factors which may influence the machine's capability:
  - the length and uniformity of the slope section,
  - the nature of the terrain directly below and above the steep section,
  - season,
  - the experience of the operator,
  - the thickness of the debris or material to be mulched,
  - the hydrology and texture of the slope including rock content
- No mulching will occur on slopes greater than 45%.
- Avoid travelling on side slopes. Such activity can cause the machine to slip a track and/or lose balance.
- Travel at a safe speed, slow down for rough sections.
- Be conservative when attempting to mulch standing timber. Timber with diameter of 15 cm or more should be felled prior to mulching.
- · Be aware of sparks produced by mulcher.



### Heavy Equipment Operation - Excavator & Loader Safety

#### **Stay Clear of Pinch Points**

- Counter weight over tracks
- Counter weight between stationary objects
- Attachments
- Grapple loads and stationary objects

#### By-standers must stay out of excavators Danger Zone of 15m

- Never squeeze between machine and a stationary object
- Never go around or under suspended loads
- Maintain Eye Contact with Operator when within Danger Zone (15m) and/or swing path
- Never approach from behind machine or blind side

#### **Practice Good communication**

- Be Patient
- Ensure other workers on site are aware the equipment is in operation
- Maintain eye contact between ground crew and operator
- Use proper hand signals, given by one person only
- Know who is in charge of the procedure

#### **Stay Clear of Obstacles**

- Operator must ensure work area is clear and safe to operate, be aware of:
- Stationary objects & overhead lines
- Other workers in the area

#### **Environmental Considerations**

- Frozen or slippery conditions may result in loss of control
- Over functioning and/or slow response in hydraulics during extreme cold temperatures

#### **Equipment Limitations**

- Safety must be engaged before exiting excavator **or** when another worker approaches the machine
- Grapples should not be lifted higher than the cab of the excavator, 4m or 12 ft. maximum
- Load limit of 4500 kg (10 000 lbs) working off the front of the machine. Weight limits are half when working from machine sides. Know your limits
- Never operate Equipment that has a safety device modified or damaged



• Reverse is sometimes forward, depending on machine orientation

#### **Operator Limitations**

- Fatigue and stress management
- No cell phone use or smoking in designated areas including the equipment safe zone
- Appropriate personal protective equipment use
- Following safe work practices and procedures

### **Hydraulics**

Hydraulics are designed to use a great amount of pressure for lifting heavy loads. Danger in using hydraulics can be present from the weight of the load, the weight of the lifting arms, pressure within the lines and heat build-up within the fluid column.

#### **General Guidelines**

- When parking or leaving a machine, the hydraulic rams and arms must be in the down or parking
  position so that no pressure is on them when the controls are unattended. An exception could be
  made if sufficient blocking is used to support the arm or ram in instances where servicing or repairs
  call for a raised position.
- Pressure in a hydraulic system is very high. Do not tighten or loosen any fittings while under
  pressure, as a fitting can break, releasing hot pressurized oil into your face. When the pressure is
  released suddenly, the rams will collapse just as suddenly.
- Never walk under or work under raised hydraulics unless it rests on support blocks or has a built in safety device (such as car lifts that are used in garages).
- Never work on a system under pressure if it can be avoided. Make sure you are aware of the system you are working on before any attempt at repairs. Consult operating and servicing manuals.
- In some systems, the hydraulic fluid is subjected to extreme pressure and this in turn can raise the temperature of the hydraulic fluid to the point of scalding.
- If you should get hydraulic oil in your eyes, wash it out immediately. If hydraulic oil gets on your skin, also wash it off immediately, as there may be some danger from absorption into the skin.
- Never reach in between operating arms or scissors or over or under the boom section of operating hydraulics, especially under raised hydraulics.
- Never trust hydraulics to hold a load or even the weight of its lifting parts. If you make this a rule, then you should be safe around hydraulics.

# Hydrogen Sulphide (H2S)

Workers that may be exposed to H2S during regular work tasks

Workers must be made aware of the possibility of H2S exposure at the work site



- Workers that maybe exposed to H2S must have third party certification
- Must have access to instrumentation indicating H2S levels at the worksite
- Must not work at levels exceeding 10 ppm over an 8 hour time period
- Must not be exposed to 15 ppm or greater at any time without adequate respiratory equipment
- Must review emergency response scenarios for H2S exposure prior to entering the worksite

Hydrogen Sulphide is a deadly gas with the following properties:

#### **COLOR**

Colorless, no visible sign of H2S to warn you of its presence.

#### **ODOUR**

- Smells like "rotten eggs".
- Impairs your sense of smell at low concentrations.
- DO NOT rely on your sense of smell to detect H<sub>2</sub>S.

#### **VAPOUR DENSITY**

- Slightly heavier than air (1.19 compared to 1.0 for air).
- In gas mixtures, it will be present wherever the gas mixture is found.
- Gas mixtures may be heavier or lighter than air depending on their vapor density and temperature compared to the ambient atmosphere (usually air).
- In its pure state or as a high proportion of a gas mixture, it may flow or settle into low-lying areas such as pits, trenches and natural depressions.

#### **FLAMMABILITY**

- Burns with a blue flame and gives off Sulphur dioxide (SO<sub>2</sub>) gas. This SO<sub>2</sub> gas is hazardous and irritates the eyes and the respiratory system.
- Highly explosive when mixed with air, depending upon the proportions.

#### **SOLUBILITY**

- Dissolves in water, oil, sludge, emulsions, well fluids and molten Sulphur.
- H<sub>2</sub>S is released when liquids are agitated, depressurized or heated.

DETECTION		
Less than 1 ppm	You can smell it.	
10 ppm (8 hr OEL)	No known adverse health effects.	
20 to 50 ppm	Eyes and respiratory tract irritation and loss of smell will also cause headache and nausea.	
100 ppm	Immediately Dangerous to Life and Health (IDLH).	



IDLH refers to a hazardous atmosphere where a person without adequate respiratory protection may be fatally injured or suffer immediate, irreversible or incapacitating health effects.	
500 to 700 ppm	Affects the central nervous system.
	Within a couple minutes, it causes a loss
	of reasoning, loss of balance,
	unconsciousness and a stoppage of
	breathing.
700 to 1000 ppm	Immediate loss of consciousness.
	Permanent brain damage and death will
	occur if you are not rescued immediately.

#### **BREATHING APPARATUS**

The accepted industry practice is to wear breathing apparatus at 10 ppm and above. Good work practices should aim for zero exposure of  $H_2S$  at all times. No workers shall be exposed to  $H_2S$  concentrations exceeding the approved 8 hour OEL.

The only approved type of breathing apparatus for use in the petroleum industry for the protection from  $H_2S$  atmospheres is the type that maintains positive air pressure in the face piece. This type of breathing apparatus provides the user with a supply of safe breathing air. There are two kinds of air supplying apparatus. They are:

#### Self-Contained Breathing Apparatus (SCBA). Its characteristics include:

- Unrestricted mobility.
- Portable.
- Excellent for safety watch and rescue operations.
- Has limited air supply.
- Bulky and heavy.

#### **Supplied Air Breathing Apparatus (SABA).** Its characteristics include:

- Continuous air supply.
- Lighter and less bulky.
- Limited mobility due to airline length.
- Airline can tangle.
- Must exit area in the same way you entered to avoid airline tangles.

**Note:** Always follow the manufacturer's instructions for fit testing. Poor fitting will lead to loss of air, reducing the usable time of your breathing apparatus.



### Ladders and Scaffolds

- All straight and extension ladders, except those used for tower work must be equipped with non-slip feet.
- Before using a ladder, make sure it is located on a stable base and secured against movement.
- Employee's servicing energized electrical equipment must use a non-conductive ladder.
- Metal ladders or ladders containing wire reinforcement in the side rails may not be used near energized conductors except as follows:
- Tower ladders may be used for work on metal transmission and station structures by an electrical journeyman or under the direct supervision of a journeyman.
- Metal scaffolds may be used near energized conductors under the following conditions:
  - Limits of approach must be observed at all times.
  - Must be erected and dismantled by and or under the direct supervision of an electrical journeyman.
  - o Whenever the scaffold is to be moved a safety watch must be appointed.
  - Securely immobilize when in working position.
  - o Must be treated as an item that requires a safety ground.
  - Must have number2/0 AWG flexible copper bonding straps across each of the joints in one vertical leg.
- When a ladder is used against a pole it must be equipped with a proper fitting at the top that conforms to the shape of the pole.
- Ladders must be available for workers when they climb on suspension insulators.
- No ladder may be set inside the bucket of an aerial man-lift.
- In EHV areas, defined as 325kV or higher phase-to-phase, metal ladders may be used under the direct supervision of qualified workers. The following conditions apply:
  - The ladder must be moved with caution. It must be carried horizontally as close to the ground as possible (not on the shoulder).
  - o It must be bonded to ground when in use.
  - o When a ladder is left unattended unauthorized persons must not be permitted to move it.
  - When a ladder is not in use it must be locked away so that unauthorized persons cannot move it.
- In EVH areas, defined as 325kV or higher phase-to-phase, metal scaffolds many be used under the following conditions:
  - o The scaffold must be grounded with a safety ground.
  - The individual sections must be electrically bonded as in Paragraph 3.
  - Non-metallic platforms must be covered with metallic gridding that is bonded to the
  - A metallic wand, bonded to the scaffold, must be used to establish initial contact with metallic objects.
  - o All metallic objects that workers may touch must be bonded to the scaffold.
  - o Exceptions are small items such as hand tools, bolts and nuts.



- Ladders in poor condition should be clearly labeled "Do Not Use" and taken out of service without delay.
- Ladders must not be stored where they will fall, impede traffic or suffer damage.
- The top three rungs or steps of a ladder must not be used to support a worker's weight. The waist of the worker on a ladder must not rise above the top of the ladder.
- Extension ladders must be securely tied in the work position. The overlap between sections on the ladder must be one meter in length.
- Ladders with one extension must not exceed 14.6 meters in length and ladders with two extensions must not exceed 20 meters in length.
- Single and extension ladders must be set so that the distance from the feet to the vertical plane of support is one-fourth the length of the ladder. If the ladder is set such that a worker may step from the ladder to a landing, the ladder must extend at least one meter above the landing.
- Workers climbing up or down ladders or scaffolds must face toward the rungs or steps. Both hands must be used for climbing.
- No more than one person may be on a ladder at one time.
- Stepladders must not be used as straight ladders. The legs of stepladders must be fully spread for climbing and legs must be securely held in position when in use.
- Stepladders are no more than 6 meters high when in use and must have one frontal slope at a horizontal angle and 6 at a vertical angle.
- Paint must not be used to coat wooden ladders because it covers cracks. Only transparent coatings, such as clear varnish, may be used.
- Ladders must conform to CSA Standard Z I 1.
- Ladders and scaffolds must not be placed in front of doors that open towards them unless the doors are fastened open, locked closed or guarded. In areas of heavy traffic, it may be necessary to post a guard or erect a barricade.
- Scaffolds that are three meters or higher must be equipped with standard guardrails, mid-rails and toe boards. Without these, full fall protection is required for each worker at that height, including body harness.
- Workers using ladders, as work platforms above three metres must be secured by fall protection, including body harness, inspected prior to use.
- The company will ensure that scaffold erected to provide working platforms will comply with CSA Standards CAN/CSA-S269.2-M87 (1998), Access Scaffolding for Construction Purposes.
- Scaffolding must be designed and constructed to support at least 4 times the load that may be imposed on it.
- Scaffolding will be tagged at each point of entry indicating the status and condition as follows:
  - A green tag with "Safe for Use" or similar wording to indicate it is safe to use.
  - A yellow tag with Caution: Potential or Unusual Hazard, to indicate the presence of a potential or unusual hazard.
  - A red tag with "Unsafe to Use", or similar wording to indicate that it is not safe to do so.



#### Portable Ladders

Before using any ladder, ensure to receive proper training on ladder use and inspection. Make sure that it is CSA certified, in good condition and is the right ladder for the job to be done. Remove any damaged ladder from service.

When setting up a ladder, secure the base and "walk" the ladder up into place.

- The ladder should be set at the proper angle of one (1) horizontal to every four (4) vertical.
- Before using a ladder, make sure it is located on a stable base and secure against movement.
- When in position, the ladder should protrude one (1) meter above the intended landing point.
- Workers must not work from the top three rungs of a ladder.
- Don't overreach while on a ladder. It is easier and safer to climb down and move the ladder over a few feet to a new position.
- Always face the ladder when using it. Grip it firmly and use the three-point contact method when moving up or down.
- The minimum overlap on an extension ladder should be one (1) meter unless the manufacturer specifies the overlap.
- Keep both metal and wood ladders away from electrical sources.

## Lifting Manually

Prior to lifting manually, one should always perform a hazard assessment to so that when necessary, we eliminate the manual method of lifting where the use of dollies, hoists, booms, hoes and other tools to do the job more efficiently.

Using the right technique and obtaining training to lift heavy objects can greatly reduce the risk of injury to the back and spine. Workers will be provided with adequate training on lifting procedures to ensure workers safety and reduce the risk of accidents.

- Straighten legs; keeping back straight so your legs, not your back, are doing the lifting.
- Transfer the weight of the load to stronger parts of your body using handgrips, straps or belts.
- Reduce the twisting of your body; keep loads in front of you; turn by moving your feet, not your body.
- Break or divide the material into smaller loads for easier transport.
- Get help, have a team of workers share the work.

**NOTE:** Never lift an object of any sort until you have some idea of how heavy it is.

## Lifting/Hoisting with Machinery

#### **Evaluating the Load:**



A competent worker shall identify the weight of the object or load prior to a lift to make sure that the lifting equipment can operate within its capabilities.

**Note:** All rigging and slinging must be completed by a trained and competent worker.

#### **Balance the Load:**

Estimate the center of gravity or point of balance. The lifting device should be positioned immediately above the estimated center of gravity.

#### **Landing the Load:**

Prepare a place to land the load. Lower the load gently and make sure it is stable before slackening the sling or chain.

- Select only alloy chain slings and NEVER exceed the working load limits.
- Make sure the hoist or crane is directly over the load.
- Use slings of proper reach. Never shorten a line by twisting or knotting. With chain slings, never use bolts/nuts.
- Never permit anyone to ride on the lifting load.
- Make sure all personnel stand clear from the load being lifted.
- Never work under a suspended load.
- Never leave a load suspended when the hoist or crane is unattended.
- Inspect all slings thoroughly at specified intervals and maintain them in good condition. Defective equipment should be discarded immediately.
- Inspect each chain or sling for cuts, nicks, bent links, etc. before each use. If in doubt, don't use it.
- Ensure that hooks have safety latches and are in good working condition.
- Ensure that the signaler is properly identified and understands techniques of proper signaling.
- Make sure a tagline is used to control the load.



# Load Securement

All cargo must be secured on a commercial vehicle.

Materials Required: Tie downs, chains or webbing.

#### **Supervisor Responsibility:**

Facilitate and/or provide proper instruction to their workers on protection requirements and training. Ensure Trailers and Vehicles are in adequate condition for use.

#### **Worker Responsibility:**

Inspect strapping and tie downs prior to use for cuts or wear that may compromise strength. Use strapping to immobilize load. Some methods include:

Bulkhead, Sideboards and End-gate

These must be secured to the vehicle, strong enough and high enough to hold the load and no openings large enough to permit any part of the load to pass through.

Straps, Chains, or Webbing

The load must be secured by not less than the minimum number of tie downs.

The (aggregate) safe working load of the tie downs must not be less than the weight of the load secured.

#### Number of Tie Downs Required: Rule of Thumb

Use 2 tie downs for the first 2.5 meters and 1 tie down for every 2.5 meters thereafter.

Length of Load (along longitude axis of vehicle)	Min # of Tie Downs
2.5m (8 ft.)	2
2.5 m – 7.5 m (8 – 24 ft.)	3
7.5 m – 10 m (24 –33 ft.)	4
10 m – 12.5 m (33 – 41 ft.)	5
12.5 m – 15 m (41 – 49 ft.)	6

#### Exception:

An article less than 2.5 meters in length and less than 1.5 meters high, butted against a bulkhead or another substantial article, then only one tie down is required.



## Maintenance & Repair of Equipment

All machinery will undoubtedly need to be serviced or repaired at some point in time. Mechanics and workers should always be on the lookout for such pieces of equipment.

If it is noticed that a part needs repair or service, the worker shall notify his immediate supervisor so that a qualified person can get the part working again properly.

The following points should be considered when servicing or repairing equipment:

- Suspended machines or heavy parts beneath which workers must work must be blocked.
- Gasoline, Carbon "Tet" or solvents that have a flash point of less than 38 degrees Celsius shall not be used for cleaning.
- Repairs or adjustments must not be made while equipment is in operation.
- All guards must be in place while equipment is in operation.
- Engines shall not be turned over by means of fan felts or other belts.
- Decks, platforms, steps, etc. must be kept free from oil, grease and loose tools.
- Engines on equipment must be stopped before refueling.

Fuel trucks, lube units and service vehicles shall be equipped with approved fire extinguishers.

## Noise Exposure

The company will take all reasonable steps necessary to ensure that the risk of hearing damage to employees who work with loud equipment or in a noisy environment is reduced as far as reasonably possible.

Noise levels in offices can cause a disturbance when interfering with communication.

The company will take all reasonable steps to minimize the disturbance caused by noise from the company premises affecting people in the surrounding neighborhood. The company will ensure that a worker's exposure to noise does not exceed the noise exposure limits in Schedule 3. Table 1 of the OHS Code and 82 dBa Lex. (updated CSA standard Z107.56-18 – 2023)

Whenever a problem arises caused by noise in the workplace, employees must inform the supervisor immediately. When an employee reports matters relating to noise in the workplace as a health and safety issue, the company will:

- Take all necessary steps to investigate the circumstances.
- Take corrective measures where appropriate.
- Advise the employee of the actions taken.

#### **Noise Assessment**

Regular noise exposure assessments and noise level surveys of noisy areas, processes and equipment will be conducted. These measurements will form the basis for corrective measures if necessary. Assessments and



surveys will be recorded and updated regularly, particularly when changes in working practices cause changes in noise exposure levels for employees.

#### **Reduction of Noise Exposure Levels**

The company will, as far as reasonably practical, take all steps to reduce noise exposure levels of employees by means other than that of personal protective equipment. This will include reducing exposure times of noise to ensure that a dose rate of 82 dB (A) for 8 hours is not exceeded. The use of ear protectors is a last resort, and is committed to continually seeking and introducing alternative methods for reducing noise exposure levels wherever possible in the future.

#### **Provision of Ear Protectors**

Suitable and effective ear protection is worn by employees working in high noise levels, as indicated on the assessments. The company will provide for the maintenance and repair or renewal of the protective equipment and provide training at orientation in the selection and fitting of protectors and details of the circumstances in which these should be used. All Ear Protectors must be CSA Approved Standard Z94.2-02.

Fit testing of hearing protection A new requirement has been added for employers to ensure workers are fit tested for the hearing protection devices they use and wear. Fit testing of the devices must meet the updated CSA Standard Z94.2-14 (R2019), Hearing Protection Devices – Performance, Selection, Care, and Use. This change is intended to prevent noise induced hearing loss. The effectiveness of hearing protection is greatly reduced if the equipment does not fit correctly or is not inserted or worn correctly.

#### **Ear Protection Zones**

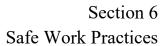
The company will designate and clearly mark ear protection zones, which may include particular areas, operations or pieces of equipment. All personnel entering these zones will be required to wear ear protectors inside these zones.

#### Use and Maintenance of Noise Control Equipment and Procedure

The company will maintain all equipment and monitor all procedures introduced for the purpose of reducing noise exposure of employees, such as enclosures, silencers, machine covers etc. All workers will be required to use these procedures and equipment correctly and report any defects or deficiencies to the supervisor immediately.

Working in high levels of noise without proper protection can cause irreversible damage to hearing. Even at lower levels noise can cause disturbance and stress. The risk of noise harming workers can be minimized by taking the following precautions:

- Avoid making unnecessary noise.
- Assist when noise assessments are being performed, so that measurements are as accurate and realistic as possible.







- Use all equipment and follow all procedures designed to reduce noise exposure levels. Do not modify
  or interfere with any such equipment without authorization and ensure that it is properly
  maintained.
- Always wear the ear protection provided when required to do so (e.g. in marked ear protection zones). Make sure that ear protectors are properly fitted and kept in a good state of repair.
- Promptly report any problems cause by noise at work and all situations which may lead to increases in noise exposure levels, such as defects in equipment or changes in working practices.
- Inform a responsible person of training needs related to noise and participate fully in any training provided.
- TIPS TO CHECK THE FIT OF FOAM EAR PLUGS Use your fingertips to feel if the ear plugs are fully inserted into the ear canal, use a mirror to check, or have a coworker visually confirm. Cup hands tightly over your ears. If sounds are much more muffled with your hands in place, the earplugs may not be sealing properly. Talk out loud. Your voice should sound hollow, as if you are talking in a barrel. Listen for noises around you. Noises should not be as loud as they were before inserting the ear plugs. TIPS TO CHECK THE FIT OF EAR MUFFS Read the manufacturer's instructions on how to don the ear muffs. Make sure the ear muffs cover the whole ear, and do not have anything in between that prevents a good seal between the ear muff and the ear (for example, prescription eyewear). Listen for noises around you. Noises should sound muffled and not be as loud as they were before putting on the ear muffs.

#### **Noise Monitoring Assessments**

The company will monitor noise exposure and provide protection when the sound levels within its facilities exceed those shown in Table 1, when measured on the A scale of a standard sound level meter at slow response. Noise monitoring will be accomplished, where circumstances such as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, representative personal sampling will be used. Personal sampling will be done using a personal noise dosimeter meeting the specifications of ANSI S1.25-1991, or equivalent standard. Monitoring will be repeated whenever a change in production, process, equipment or controls increase noise exposures. Instruments used to measure employee noise exposure will have been calibrated to ensure measurement accuracy.

#### **Exposure Reduction**

When employees' exposure exceeds that listed in Table 1, feasible administrative or engineering controls will be utilized. If such controls fail to reduce exposure to within the levels of Table 1, personal protective equipment will be provided and used to reduce exposures to within the levels of the table. For purposes of this standard, an 8-hour time weighted average (TWA) of 85 dBA measured on the A scale at slow response or, equivalently, a dose of fifty percent shall be considered the Action Level. For all employees exposed to noise at or above the Action Level, the company will make hearing protectors available at no cost to the employee. Hearing protectors will be replaced at no cost as necessary. Ensure that hearing protectors are worn. Provide a variety of suitable hearing protectors from which to select.



#### **Training**

Although the work scope generally does not expose the worker to loud noises, training to all workers will be provided in case a worker works at sites where loud noise does exist. The company will train all workers who are exposed to noise at or above the Action Level and will ensure employee participation. Information provided in the training program will be updated to be consistent with changes in protective equipment and work processes. At a minimum, training for each employee will consist of the following:

- The effects of noise on hearing.
- The purpose of hearing protectors.
- The advantages and disadvantages of various types of hearing protectors.
- Instructions on selection, fitting, use, and care of hearing protectors.

Table 1 PERMISSIBLE NOISE EXPOSURES	
Duration per	Sound level dBA,
Day/hours of exposure	slow response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

## Office Safety

In order to protect workers from injuries associated with an office environment, the following instructions should be followed:

- Ensure you are conversant with emergency evacuation procedures.
- Ensure that all electrical cords are in good condition and are not overloaded.
- Ensure that computer monitors are adjusted to the correct height and are kept clean.
- Ensure fans/space heaters are used to the manufacturer's specifications.
- Ensure floors and aisles are kept clear and not cluttered.
- Ensure that only one drawer of the filing cabinet is open at one time and that the drawers are closed when not in use.
- Ensure that a proper type of fire extinguisher is available.
- When transporting materials of a heavy nature, ensure that handcarts and trolleys are used properly.
- Operate the microwave and coffee machines according the manufacturer's specifications.
- Ensure the photocopier is maintained according the manufacturer's specifications.
- Ensure chairs are in good repair.



- Ensure rugs are kept clean and in good repair free of tripping hazards.
- Ensure paper cutter blade is placed in the closed "lock" position.
- Ensure all loose clothing is tied back when using the paper shredder.

# Pit Safe Management Practices (Aggregate)

When working in an aggregate quarry, workers must take appropriate precautions against potential hazards that may be encountered in the work area. For example;

- Ensure roadways are properly maintained.
- Install proper signage to direct traffic as well as to instruct workers when they are required to remain in their vehicle
- Ensure loads are not overloaded in weight or height. Follow permitted axle weight and gross weight as defined by legislation
- Maintain equipment in good working order.
- Use 3 point contact when entering and exiting vehicles or equipment
- Use proper traffic control procedures, utilize backup alarms and warning lights on vehicles and equipment whenever possible.
- Be aware of overhead obstructions
- Be aware of wildlife in the area
- Be aware of open excavations and steep embankments
- Workers should be aware of potential airborne rocks launched from truck tires when out of the scale house, vehicle or equipment cabs.
- Operators should be aware of soft or uneven surfaces, congested loading areas and bystanders close
  to loading or unloading operations to prevent injury from tipping. Work areas should be cleared
  before initiating work.

### Portable Heaters

Only competent and trained workers are to install, ignite and service portable heaters.

When using heaters ensure that manufacturer's use and maintenance instructions are followed.

Ensure that adequate ventilation is established to avoid buildup of exhaust gases.

**Note:** If portable heaters are to be used in potentially hazardous atmospheres, ensure that a hot work permit is issued (if required).

# Pressure Washer Safety

**General Safety Precautions** 



- Always follow the complete safety precautions and operating procedures as described by the manufacturer.
- Fluids under high pressure from spray or leaks can penetrate the skin, causing an extremely serious
  injury that could result in amputation or death. Never try to stop or deflect a leak with your hand or
  body.
- If new couplings are placed on the end of a hose, ensure that the fitting has been properly crimped. Failure to do so can cause blown couplings.
- Never start the washer until you are certain that the quick coupler sleeves are in the locked position.
- Avoid abrasion to the hose by pulling it in sections rather than grabbing one end of the line and pulling the full weight of the line.
- Allow sufficient slack in the hose to accommodate "pulse shortening."
- Do not allow the hose to be bent beyond the manufacturer's specified minimum bend radius. If this limit is exceeded, the hose may burst at the bend.
- A pump malfunction may cause unusually high pressures that in turn, may cause a hose to burst. If a pump malfunction occurs, inspect the hose and all other high pressure fluid handling components.
- Drain the hose after each use. Flush a hose that was used for chemical cleaning according to the manufacturer's instructions.
- Do not wind a hose so tightly that kinks result. Do not suspend the wound up hose from a narrow and/or sharp object such as a nail, metal hook or pin. Ideally, hoses should be stored on a hose reel.
- In winter, do not store a hose in a below-freezing environment as this may cause it to crack when flexed. If a hose is stored in cold temperatures, it must be warmed prior to use to avoid cracking.
- Inspect all cords to ensure that they have not been damaged.
- Use only mild detergents with pressure washers. Always rinse the injection system with water to prevent corrosion or gumming of the parts.

### **Propane Cylinders**

In order to protect workers from injuries associated with the care and use of propane cylinders, the following points should be observed:

- No person shall handle propane cylinders or use propane cylinders until they are fully aware of the potential hazards and the precautions necessary to handle propane safely.
- Supervisors are responsible to provide proper instruction to their workers on protection requirements and TDG compliance.
- Ensure WHMIS 2015 and TDG labels are attached and visible.
- Cylinders are to be transported and secured in an upright position in a ventilated area.
- Cylinders should not be stored inside buildings or carried in closed canopies, vehicles, tool vans, etc.
- A regulator is to be installed on the cylinder prior to use.
- When checking for leaks, use a soapy water solution.
- When not in use, the cylinder should be secured in an upright position with the valve closed and the regulator removed. A plug or cap must be used to seal the opening of the valve.



- Cylinder should not be used if label/stamp is not legible.
- Cylinder should not be painted in any fashion.

## Rigging

Rigging includes the usage of rope, wire rope, chains, slings and other fittings and attachments.

#### **General Guidelines:**

- All wire ropes, chains, slings, etc. should be inspected prior to usage. If the rigging equipment is worn, frayed, kinked, twisted or showing any sign of damage or weakness, it should not be used.
- All rigging and slinging must be completed by a competent worker.
- Hooks that are stretched, twisted or cracked should be taken out of service.
- Defective equipment should be sent for repair or disposal. Management should be notified of all defective equipment so that corrective actions can be taken.
- Pinch points on cables can be eliminated by installing rounded fitting thimbles.
- Ensure that the workload on rigging or rigging equipment does not exceed the manufacturer's recommended limits.
- All rigging equipment should be inspected after use and stored in an appropriate storage location. This will prevent rusting and damage to equipment.

### Rotating Equipment

Hazards of rotating equipment can be:

- Improper fitted clothing being caught up in machinery.
- Loose gloves getting pulled into machinery.
- Jewelry and long hair getting caught into machinery.

In order to prevent this incident from occurring, ensure that rotating equipment has guards that are in working order before using the equipment.

For rotating equipment that cannot be fitted with guards, ensure that safety procedures are established to identify the hazard and to reduce the risk of injury. Be sure to re visit these procedures to ensure that the hazard is identified and risk reduced.

## Sulphur Dioxide (S02)

Sulphur Dioxide  $(SO_2)$  is a colorless, non-flammable gas with an unpleasant odor and an irritating effect that makes it lie in heavy concentrations near ground level.



<u>Toxicity:</u> Sulphur Dioxide is an irritant, especially to sensitive skin and mucous membranes. It can also cause damage to the eyes. High concentrations in the air can cause reddening and burning of the skin, but the most outstanding effect is the irritation of the respiratory tract.

<u>Treatment</u>: A victim of acute exposure to Sulphur dioxide should be kept warm and if breathing is difficult, artificial respiration should be performed as soon as possible. Patients overcome by  $SO_2$  fumes should be removed from the exposure area as quickly as possible but the rescuer should be sure he is suitably protected.

### Traffic Control

Protecting workers from injuries associated with traffic on work sites. Traffic at work sites must be regulated in such a manner to protect the safety and well-being of all personnel and equipment as well as passing motorists.

- Follow the safe job procedure
- Wear the appropriate Hi-Vis PPE, florescent yellow coveralls with high visibility striping, appropriate footwear and florescent orange headgear.
- Ensure all employees are properly trained & certified
- Provide and review the Emergency Response Plan
  - Vehicles should park, pointed towards the exit with the doors closed, unlocked and the keys in the ignition
  - Always make an escape plan
- Erect signs and barricades to direct traffic safely around worksite
- Inspect and have all necessary signs and barricades in good use at least daily
- Unnecessary signs should be removed or covered
- Restrict on-site traffic when possible
- Obtain authorization to enter restricted work areas, leases or plant sites
- Pack own water to site and ensure you are hydrated and are dressed for outdoor weather
- Ensure radios are charged before shift
- Be polite and clear to motorists
- Log notable incidents with vehicles and/or motorists

#### When using a stop/slow paddle:

- Keep the paddle high so in clear unobstructed line of driver vision
- Avoid waiving the paddle
- Allow drivers time to react to the signals
- Wait for approaching traffic to stop before walkingon to roadway



- Use free hand to give direction
- Never turn your back on approaching traffic
- Be aware of traffic approaching rom the rear. Periodically shoulder check
- When not in use, paddles should be turned upside down or held behind back

### Truck Winching

- If pulling or winching another vehicle out of the ditch, use extreme caution with respect to other traffic.
- Use appropriate people as flag personnel to control oncoming traffic when required.
- Never winch across a roadway unless traffic is stopped in both directions.
- Winching operations must be under the direction of one person. All personnel involved must be certain of their roles and communicate clearly with each other. The person directing the operation must stand well clear and to the side of cables under tension.
- If a winch line or tow strap breaks, the broken end can snap back with enough force to maim or kill anyone in its path. This applies to all lines, so use extreme caution.
- All personnel must stay well clear of any line under load.
- Use a snatch block, if possible, when winching.
- Handle winch cables with gloves to avoid cuts and steel slivers. Never let a winch cable slide through your hands. Use the hand-over-hand method.
- Use extreme care when spooling the slack cable back onto the drum of the winch. Stand well back (minimum 1 meter) from the cable guides to allow time to stop the winch if a glove gets caught or to get free if the winch malfunctions.
- Wind the cable on the drum neatly so that when tension is put on the line it does not kink the cable. A kinked cable loses strength and could snap under tension.

### Towing

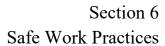
Occasionally, it may be necessary for a worker to tow a disabled vehicle or machine to a safer area or disengage the vehicle or machine from snow or mud. Extreme caution should be used in the procedure, ensuring that proper towing equipment is available and is excellent working order. Never substitute ropes or cables for towing. Confirm that the vehicle being used for towing has the appropriate towing package.

If pulling another vehicle out of the ditch, **USE EXTREME CAUTION** with respect to other traffic. If it cannot be achieved with a margin of safety, **DO NOT ATTEMPT IT**.

Only the drivers in the vehicles should be involved in the operation. All other personnel shall stand clear. The drivers involved should be certain of their roles and communicate clearly with each other.

The following Safe Work Procedures shall apply:

• Confirm that all workers are clear of the area prior to engaging the reverse gear for backing up.







- Remain on or in the machine.
- Disengage the gears and confirm before the operator or helper hooks up the tow winch mechanism.
- Prior to towing, confirm again that all workers are clear of the machine being towed.
- When the tow is complete, stop the towing machine, disengage gears and have the helper unhook the winch line. Confirm that there is no added tension on the winch line before releasing it.
- Before pulling away from the towed vehicle or equipment, confirm that all workers are clear of the area. Confirm eye contact and account for all workers.

#### **RELEASE OF RESPONSIBILITY**

In the event that you are requested by another company's employees to pull them out of the ditch, you must have the operator/owner of vehicle/equipment who is requesting your assistance fill in and sign the release of responsibility form before beginning the towing process.

Insurance regulations state that the vehicle doing the towing is the vehicle in control and thereby responsible for any damages or liabilities that may occur. Therefore, it is imperative that a release of responsibility form be signed to eliminate this responsibility.





Towing Consent Form	
Date:	-
To Whom It May Concern:	
	equipment, License Number and details as listed below, Pirt Works Ltd. as a Good Samaritan, to pull me out of
other traffic on the road and the procedure	esponsible for the safety of all personnel involved; any e and equipment used in the towing process and hereby employees for any damage or liability that may occur.
Name of Company:	
Address:	
Operator Name:	
Unit #	License No
Operator's Signature	
Wild West Dirt Works Ltd. Employee Sig	nature



### Ventilation

Proper ventilation is necessary during welding and painting operations to ensure the safety of personnel.

#### **Natural Ventilation**

Unlimited fresh air and probably a wind or breeze should eliminate many problems, unless toxic materials are involved. However, your first defense against fumes and gases is to stay upwind.

#### **Mechanical Ventilation**

A mechanical ventilation system is common in many workshops. Air is pumped into the premises, passes through and is vented outdoors through doors and windows.

#### **Local Exhaust Ventilation**

This consists of an exhaust fan that captures the fumes and their source and exhausts them outdoors.

#### **Portable Smoke Extractors**

These devices can be taken into confined spaces or to other premises. Air and fumes that are drawn into these devices should be vented outdoors.

#### **Isolation Chambers**

Isolation chambers are used when welding materials produce extremely dangerous fumes. The chamber is a metal box with built-in sleeves and gloves, into which the work is placed. The welding is viewed through a window and fumes are vented outdoors.

Injuries and death that result from poor ventilation can be avoided. Ensure that you use the proper and correct type of ventilation.

### Valves

#### **Potential hazards**

Ensure that when opening a valve you have been properly trained to do so. The opening of a valve can change the pressure in the pipe and release of energy can produce enough force to blow a valve or gasket.

When trying hard to open a stubborn valve you may strain yourself through overexertion. If a valve suddenly gives, excessive force can cause a fall. Ensure that you are paying close attention to the task at hand.



# Welding, Cutting & Burning

Work activities that involve welding, cutting and burning can increase the fire and breathing hazards of any job. The following guidelines should be considered prior to the start of work:

#### Guidelines

- Always ensure that adequate ventilation is supplied since hazardous fumes can be created during welding, cutting and burning.
- Workers performing hot work must have training prior to welding, cutting, grinding or burning.
   Training will be given to all competent workers. Workers should also aware of emergency response procedures in the event of an incident.
- Where other workers may also be exposed to the hazards created by welding, cutting and burning, they must be alerted to these hazards or protected from them by the use of "SCREENS."
- All gas management systems must be equipped with flashback arrestors between the torch and regulator to prevent a flashback.
- Never start work without proper authorization or permits, if required.
- Always have firefighting or prevention equipment on hand before starting work.
- Check the work area for combustible material and possible flammable vapors before starting work
- Containers that may have held a combustible substance must be thoroughly cleaned before work is performed on them
- A welder should never work alone. A fire or spark watch should be maintained.
- Check cables and hoses to ensure that they are free from defects, leaks, oil and grease. Be sure to protect them from slag or sparks as work is performed.
- Never weld or cut lines, drums, tanks, etc. that have been in service without making sure that all precautions have been carried out.
- Never enter, weld or cut in a confined space without proper gas tests, a required safety lockout and confined space permits, if required.
- When working overhead, use fire resistant materials such as blankets or tarps to control or contain slag and sparks.
- Cutting and welding must not be performed where sparks and cutting slag will fall on cylinders. Move all cylinders away to one side.
- Open all cylinder valves slowly. The wrench used for opening the cylinder valves should always be kept on the valve spindle when the cylinder is in use.
- Workers engaged in electric welding shall wear gauntlet gloves and arm protection. Ragged or oil-soaked clothes should not be worn by workers engaged in or near welding operations
- Items recently torched or welded must be marked "HOT" or guarded to prevent contact by another worker. Monitor the work area for 30 minutes after performing hot work for fire or other related hazards
- Equipment must be properly maintained according to manufactures requirements.



• Compressed gas cylinders must be stored and transported in a secured upright position to preventing dropping, rolling or possible impact. The value on the cylinder must be kept closed except during use. Empty bottles must be labelled as such.

### Flammable or Explosive Substances

No burning, welding or other hot work shall be done where there is or may be a flammable or explosive substance until:

- Tests by means of appropriate instruments or chemical analysis have been made to indicate that the work may be safely performed.
- Suitable procedures have been adopted and implemented to ensure continuous safe performance of the work
- Keep combustible materials out of the welding area. Remember to remove sawdust, oil spills and used rags from the work area.
- Use fire blankets or non-flammable guards to protect combustibles and equipment that cannot be removed from the work area.
- Keep fire extinguishers available one close at hand and one in the immediate vicinity. Ensure that you and those around you know how to use them. A welding mask restricts your vision; your fellow workers may see a fire before you do.
- Select all-purpose fire extinguishers unless there is a possibility of a special class of fire. In this case, prepare to fight a specialized fire before you start welding.
- DO NOT wear jewellery on the job. Rings, chains and necklaces can get caught in the stationary or moving parts of equipment.
- Always use proper safety equipment.

### Radiant Energy

"Arc Flash" is a term commonly used to describe eyes that have been burned by ultra-violet rays. When the arc flash has burned the eyes, the eyeballs are covered with small water blisters. The condition usually comes to a head several hours after exposure and quite often wakes the operator in the middle of the night.

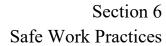
Where medical aid is not readily available, castor oil dropped in the eyes will allow for relief of pain and exclusion of air. It also offers some lubrication. If the eyes are not noticeably better in the morning, see a doctor. If they are improved, wear sunglasses for a day and avoid bright or intense light.

## X-Rays and Gamma Rays

These rays are invisible and are used to test welds. They can damage or destroy any part of the human body they come in contact with.

Distance is the best protection. Therefore, stay well away from the equipment and roped off area.

X-Rays are also produced by the electron beam welding process. If the shielding of the welding chamber is not sufficient, X-Rays can escape and cause a very dangerous situation for the operators of the equipment. This may result in cancer and destruction of body tissue.







### Care and Prevention

- If clothing is on fire, smother the fire with a blanket or rug. To lessen the shock to the individual, keep the victim lying down.
- Cut clothing away from burned areas carefully and do not attempt to remove any cloth that adheres to the burn. Cut around it.
- Cover the burned area with sterile, dry dressing of gauze, clean cotton sheets or towels. If available, the dressings may be wet with normal saline solution, but do not use other burn preparations and do not attempt to change dressings. Seek medical aid.



# Working near overhead power line

Protect workers from injuries associated with equipment activities near overhead power line.

#### **Supervisor Responsibility:**

Facilitate and/or provide proper instruction to their workers on protection requirements and training. Perform worksite inspection and complete hazard assessments.

Acquire all necessary permits and approvals; notify an overhead power line's owner (electric utility, rural electrification association, or industrial power producer) before work is done or equipment is operated near it remains unchanged.

#### **Worker Responsibility:**

- DO NOT operate heavy equipment within 7m until you have seen a permit
- Maintain minimum clearances
- Install warning signs and devices
- Install telescopic non-conductive posts and flagging across R.O.W. at the minimum allowable clearance as allowed by regulations for the line voltage.
- Position signs or other devices to determine the "Danger Zone"
- Be conversant with allowable clearances
- Adhere to all site-specific regulations
- Beware of atmospheric conditions such as temperature, humidity and wind which may dictate more stringent safety procedures.

#### In the event of overhead contact:

- 1. DO NOT attempt to leave the vehicle/equipment, unless the vehicle is on fire.
- 2. If the vehicle/equipment is on fire, you must use these steps to ensure the safest possible evacuation:
  - Jump clear of the vehicle/equipment.
  - Land clear of the vehicle/equipment.
  - Ensure that when landing your feet are together.
  - Hop or shuffle away from the vehicle/equipment, keeping your feet together.
- 3. Notify your supervisor and the local Power Company immediately. (If power line is contacted, it will trip a breaker. The power company could be turning the power back on without your knowledge.)
- 4 DO NOT attempt to remove the power line or come in contact with the power line.
  - 4. Keep all personnel away from the area.



### **WHIMS 2015**

Previously known as Workplace Hazardous Materials Information Systems (WHMIS)

Workers that are to complete tasks that involve the use or potential exposure to hazardous materials must be trained in WHIMIS 2015. Training may be obtained internally or through third party providers to ensure that workers understand:

- The contents, purpose and significance of labels and Safety Data Sheets (SDS)
- Procedures for safe use, storage, handling and disposal of hazardous products specific to the jobs site.

In addition, the following apply to WHMIS 2015 products and handling:

- All hazardous product containers MUST have a supplier label affixed
- No person shall remove, deface, or alter a supplier label so long as any amount of hazardous product still remain in the container
- Missing or damaged supplier labels MUST be replaced with a workplace label
- Workplace labels MUST be affixed to a container that a hazardous product is transferred to from its' original container UNLESS:
  - The contents will be used immediately
  - o The container will be under the exclusive control of the person who transferred it
  - o The hazardous product will be used only on the current shift
  - Contents are clearly identifiable
- Safety Data Sheets (SDS) are readily available for every hazardous product that is handled, used, and stored at the worksite (See Appendix, of this manual)
- SDS sheets are readily available to all workers that may be exposed to the hazardous product as well as to the Health & Safety Committee/Representative
- SDS sheet may be available in print or electronic form as long as they are easily accessible by all affected parties.
- SDS should accompany and chemicals brought to site.